

FLASH MEMORY DATA CORRECTION AND SCRUB TECHNIQUES

ABSTRACT OF THE DISCLOSURE

In order to maintain the integrity of data stored in a flash memory that are susceptible to being disturbed by operations in adjacent regions of the memory, disturb events cause the data to be read, corrected and re-written before becoming so corrupted that valid data cannot be recovered. The sometimes conflicting needs to maintain data integrity and system performance are balanced by deferring execution of some of the corrective action when the memory system has other high priority operations to perform. In a memory system utilizing very large units of erase, the corrective process is executed in a manner that is consistent with efficiently rewriting an amount of data much less than the capacity of a unit of erase.